JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY

Vol. 271 Nos. 1 + 2 October 25, 1989

CONTENTS

Steady state diffusion–migration potential differences in mixed conductor polymer films and thin layer cells
R.P. Buck (Chapel Hill, NC, U.S.A.) 1

Comments on the inner-layer capacity versus charge density curves
A. Hamelin and L. Stoicoviciu (Meudon, France) 15

Steady state current flow in solid binary electrolyte cells. Part 2. The effect of ion association
P.G. Bruce (Edinburgh, Great Britain), M.T. Hardgrave and C.A. Vincent (St. Andrews, Great Britain) 27

Electrochemical studies of electrode reaction adsorbed intermediates. Part I. Computerized potential step chronocoulometry on rotating disk electrodes
B. Wu and A. Sun (Wuhan, People's Republic of China) 35

Direct evidence for one-dimensional electric conduction of stacks of octa-*n*-dodecoxyphthalocyanine in the liquid crystalline phase
J.H. Sluyters, A. Baars, J.F. van der Pol and W. Drenth (Utrecht, The Netherlands) 41

Oscillatory phenomena: spontaneous alternance of the occurrence of corrosion and passivation states of an iron electrode in bromate/sulphuric acid media
F. D'Alba, S. Di Lorenzo (Palermo, Italy) and C. Lucarini (Rome, Italy) 49

Poly(2-propylaniline): an electroactive polymer, soluble in organic medium in the reduced state
G. Bidan, E.M. Genies and J.F. Penneau (Grenoble, France) 59

Alkylammonium and pyridinium group-containing polypyrroles, a new class of electronically conducting anion-exchange polymers
S. Cosnier, A. Deronzier, J.-C. Moutet and J.F. Roland (Grenoble, France) 69

Conducting polypyrrole films containing $[Ru(2,2'\text{-bipyridine})_2(3\text{-pyrrol-1-ylmethyl})\text{pyridine})Cl]^+$. Electrochemistry, spectroelectrochemistry, electronic conductivity, and ionic conductivity
J. Ochmanska and P.G. Pickup (St. John's, Canada) 83

The electron transfer at a liquid/liquid interface studied by current-scan polarography at the electrolyte dropping electrode
S. Kihara, M. Suzuki, K. Maeda, K. Ogura, M. Matsui (Kyoto, Japan) and Z. Yoshida (Tokai, Japan) 107

The influence of polyoriented gold electrodes modified by reversibly and irreversibly adsorbed ad-atoms on the redox behaviour of the Cr(III)/Cr(II) couple and the effect of chloride ions
A. Rodes, J.M. Feliu, A. Aldaz (Alicante, Spain) and J. Clavilier (Meudon, France) 127

Electroinduced structural changes in manganese dioxide + manganese hydroxide films as characterized by real-time surface-enhanced Raman spectroscopy
D. Gosztola and M.J. Weaver (West Lafayette, IN, U.S.A.) 141

Redox conversions of microperoxidase-11 on a silver electrode
V.J. Razumas, A.V. Gudavičius, J.D. Kazlauskaite and J.J. Kulys (Vilnius, U.S.S.R.) 155

The cyclic voltammetry of some sulphonated transition metal phthalocyanines in dimethylsulphoxide and in water
J.T.S. Irvine, B.R. Eggins (Newtownabbey, Northern Ireland) and J. Grimshaw (Belfast, Northern Ireland) 161

Electrochemistry of lutetium crowned ether diphthalocyanine films
M. Bardin, E. Bertounesque, V. Plichon, J. Simon (Paris, France), V. Ahsen and O. Bekaroglu (Maslak, Turkey) 173

Electroreduction of carbon dioxide on gas-diffusion electrodes modified by metal phthalocyanines
N. Furuya and K. Matsui (Kofu, Japan) 181

Phenomenological description of dark redox reactions at electrodes covered with conducting polymer films. Part I. Mechanism and kinetics of ferrocene oxidation at polythiophene
V.E. Kazarinov, M.D. Levi, A.M. Skundin and M.A. Vorotyntsev (Moscow, U.S.S.R.) 193

(continued on p. 3 of cover)

Contents (*continued*)

High platinum electrocatalyst utilizations for direct methanol oxidation
M. Watanabe, S. Saegusa (Kofu, Japan) and P. Stonehart (Madison, CT, U.S.A.) 213

Electrocatalytic reduction of chromate(VI) ions in alkaline media on Pt modified by underpotential deposition of heavy metals
D. Sazou and G. Kokkinidis (Thessaloniki, Greece) 221

Electrocatalytic oxidation of cyclopentanol on Pt and Pt surfaces modified by ad-atoms of heavy metals deposited at underpotentials
G. Kokkinidis and A. Papoutsis (Thessaloniki, Greece) 233

Catalytic current of bis(1,10-phenanthroline)cuprous complex micellized by sodium dodecyl sulphate
K. Sugiyama and K. Aoki (Yokohama, Japan) 249

Fast surface reaction study using ultramicroelectrodes
X. Chen, J. Zhuang and P. He (Shanghai, People's Republic of China) 257

Investigation of ruthenium deposition onto a platinum electrode in hydrochloric acid media
S. Szabó, I. Bakos and F. Nagy (Budapest, Hungary) 269

A voltammetric study of the electrodeposition chemistry in the Cu + In + Se system
K.K. Mishra and K. Rajeshwar (Arlington, TX, U.S.A.) 279

Acetic acid adsorption on smooth Pt electrodes. Measuring the rate of double-layer organization and rearrangement
E.K. Krauskopf and A. Wieckowski (Urbana, IL, U.S.A.) 295

Electrosorption of hydroxylated compounds: a comparative study of molecules with three carbon atoms
P.T.A. Sumodjo, E.J. da Silva and T. Rabockai (São Paulo, Brazil) 305

Short communications

Is the position of the maximum adsorption defined unambiguously for electrified interfaces?
M. Karolczak (Poznań, Poland) 319

Spectroelectrochemistry of a system involving two consecutive electron-transfer reactions
W.T. Yap, G. Marbury, E.A. Blubaugh and R.A. Durst (Gaithersburg, MD, U.S.A.) 325

An electrochemical study of the μ-peroxo complex of cobalt(III) cyclam
J. Ouyang and F.C. Anson (Pasadena, CA, U.S.A.) 331

A simple procedure for activating a glassy carbon electrode
P.K. Upadhyay (Delhi, India) 339

Preliminary notes

Forced chaotic oscillations in the reduction of $Fe(CN)_6^{3-}$ ions at a glassy carbon electrode
V.S. Varma and P.K. Upadhyah (Delhi, India) 345

Many-body effects in electrosorption: some numerical consequences for partial charge transfer
A.K. Mishra, D.F. Milner, M.J. Weaver (West Lafayette, IN, U.S.A.) and S.K. Rangarajan (Bangalore, India) 351

Book review 359

Announcements 360

Author index 363

Subject index 364

IUPAC "Quantities, Units and Symbols in Physical Chemistry" (The Green Book) 369